

LISTING OF CLAIMS

1. (Previously Presented) A polymer composition for encapsulating or carrying one or more chemical and/or biological agents, comprising a polyamine or oxirane composition or mixture thereof.

2. (Previously Presented) The composition of claim 1, wherein the polymer composition is cationic.

3. (Previously Presented) The composition of claim 1, wherein the oxirane is selected from (chloromethyl) oxirane, (bromoethyl) oxirane or mixtures thereof.

4. (Previously Presented) The composition of claim 1, wherein the composition comprises;

1,6-hexane diamine N-(6-aminohexyl);

1H-imidazole chloro methyl oxirane copolymer; and optionally water.

5. (Cancelled)

6. (Previously Presented) The composition of claim 4, wherein the 1,6-hexane diamine N-(6-aminohexyl) comprises chloromethyl oxirane.

7. (Previously Presented) The composition of claim 1, comprising:

25-45 % 1,6-hexane diamine N-(6-aminohexyl);

5-25 % 1H-imidazole chloro methyl oxirane copolymer; and

40-60 % water.

8. (Cancelled)

9. (Previously Presented) The composition of claim 4, wherein the 1H-imidazole chloro methyl oxirane copolymer is in a solution with water.

10. (Previously Presented) The composition of claim 9, wherein the 1H-imidazole chloro methyl oxirane copolymer is 30% to 50% of the solution.

11. (Previously Presented) The composition of claim 1, wherein the polymer composition is formed into a film to which the one or more chemical and/or biological agents are applied.

12. (Previously Presented) The composition of claim 11, wherein the one or more chemical and/or biological agents are non-water soluble.

13. (Previously Presented) The composition of claim 11, wherein the one or more chemical and/or biological agents are selected from one or more of: dyes, perfumes, cosmetics, detergents, fragrances, pharmaceutical preparations, pheromones, insect repellents, anti-microbial agents, enzymes and micro-organisms.

14. (Previously Presented) The composition of claim 11, wherein the chemical and/or biological agent is up to 50 microns in size.

15. (Previously Presented) The composition of claim 11, further comprising one or more additives.

16. (Previously Presented) The composition of claim 11, wherein the one or more chemical and/or biological agents are dissolved or dispersed in a solvent.

17. (Previously Presented) A method for coating or wrapping a chemical or biological agent comprising contacting the chemical or biological agent with a composition of a polyamine, oxirane or mixture thereof.

18. (Previously Presented) The method of claim 17, wherein the method is carried out at temperatures in the range of 15 - 40°C at a pH in the range of 5.5 - 7.5.

19. (Previously Presented) The method of claim 17, comprising combining the chemical or biological agent and the composition of a polyamine or oxirane or mixture thereof using a high speed stirrer.

20. (Previously Presented) A substrate comprising at least a partial coating of a composition of a polyamine, oxirane or mixture thereof.

21. (Previously Presented) The substrate of claim 20, wherein the substrate is a cellulose based material, protein based material or combinations thereof.

22. (Previously Presented) A method for dyeing fabric comprising contacting the fabric with a dye encapsulated in a composition of a polyamine, oxirane or mixture thereof.

23. (Previously Presented) The method of claim 22, wherein the encapsulated dye further comprises one or more additional compounds selected from salt, soda, wetting agents, leveling agents or dispersing agents.

24. (Cancelled)

25. (Previously Presented) The method of claim 22, further comprising treating the fabric with an after treatment after the step of contacting.

26. (Previously Presented) The method of claim 22, comprising pre-treating the fabric prior to applying the dye.

27. (Previously Presented) The method of claim 22, wherein the step of contacting is carried out by one or more technique selected from spraying, printing, padding or exhaustion techniques.

28. (Previously Presented) The method of claim 22, comprising the steps of:

immersing the fabric in water;
heating the water to a temperature of between 15 - 30°C;
cleaning the fabric so as to remove most contaminants;
adjusting the pH of the liquid to between 8 - 10;
adding the composition to the water to form a liquid;
heating the liquid to a temperature of between 40 - 80°C;
draining the liquid and rinsing the fabric;
adjusting the pH of the liquid to between 5 - 8 if necessary;
adding a colorant; and
heating the liquid to a temperature in the range of 50°C-70°C.

29. (Previously Presented) The method of claim 28, wherein adding a cellulase enzyme to the liquid is performed after the step of adding a colorant.

30. (Previously Presented) The method of claim 28, wherein the colorant is selected from one or more colorant selected from reactive dyes, direct dyes, acid dyes and pigments.

31. (Previously Presented) The method of claim 28, further adding a handle modifier.